

# Government Perspective on Electric Vehicle Fleets

Illinois Commerce Commission Beneficial Electrification Workshop December 15, 2021



### **X** Presentation Structure

- City of Chicago's Climate and Transportation Priorities
- Fleet Overview
- Electrification Goals
- Barriers and Potential Solutions
- Support for Government Fleet EV Adoption

### \*Chicago's Mobility Roadmap

- Published March 2019: <a href="https://www.chicago.gov/content/dam/city/depts/mayor/PD">https://www.chicago.gov/content/dam/city/depts/mayor/PD</a>
  <a href="fs/21755\_37\_AF\_MobilityReport.pdf">Fs/21755\_37\_AF\_MobilityReport.pdf</a>
- Provides a vision that incorporates new mobility services and technologies into Chicago's Transportation network
- Identifies immediate actions and long-term strategies to provide a reliable, equitable and environmentally-sustainable transportation ecosystem

## **\*** Guiding Principles

- A transportation system that is safe for all users;
- Mobility choices that are accessible, equitable, affordable and non-discriminatory;
- Economic development that is inclusive and innovative;
- A city that is efficient, smart and reliable;
- Communities that are sustainable, healthy, and built using universal design principles;
- Data that is actionable, transparent, shared, and secure;
- Regulation of private providers that is guided by public benefits.



#### \* Task Force Recommendations

#### Related to EVs include:

- Support investments in transportation infrastructure to meet City's mobility goals;
- Advance a transportation and mobility system that promotes the environmental health and sustainability and improves overall livability of the city;
- Prepare Chicago for Connected and Autonomous Electric **Vehicles**



### \* Assets, Information & Services (AIS)

#### **Bureau of Fleet Operations**

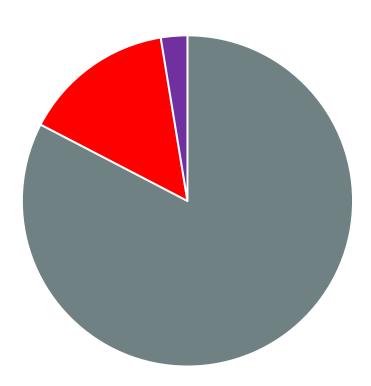
- 625 Employees
- 13 Maintenance Locations
- 11 Fuel Sites
- Consolidated Authority for all Vehicle & Equipment Budgeting, Acquisition (Purchase / Lease / Rent / Pool), Maintenance, Repair, Fueling & Tracking



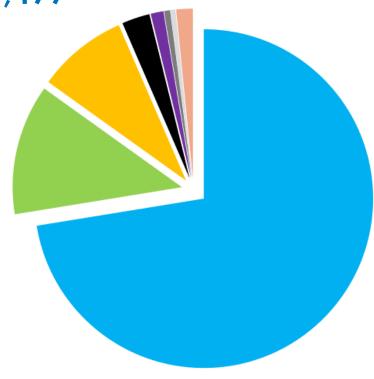


### **X** Chicago Corporate Fleet Overview

4,565 + 4,934 = 9,499



- POLICE (3,772)
- FIRE (675)
- EMERGENCY MANAGEMENT (118)



- STREETS & SANITATION (3,532)
- TRANSPORTATION (420)
- HEALTH (59)
- FAMILY & SUPPORT SERVICES (25)

- ASSETS, INFORMATION & SERVICES (607)
- FINANCE (130)
- BUSINESS AFFAIRS CONSUMER PROTEC (28)
- 10 OTHERS (<20 VEH) (77)



### **X** Police Department

• 3,772 UNITS







### **\*** Fire Department

• 675 UNITS





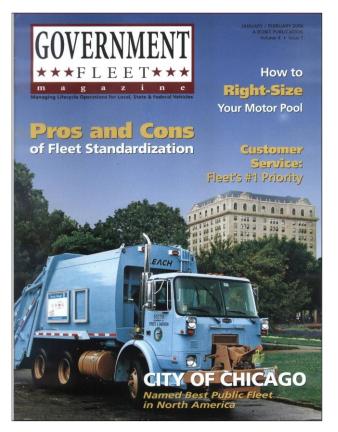


117 AMBULANCES

**126 FIRE ENGINES** 

**88 LADDER TRUCKS** 

### \* Streets & Sanitation



**505 REFUSE TRUCKS** 



**105 STREET SWEEPERS** 



367 PLOW TRUCKS W/ SPREADERS



### **X** City of Chicago's Green Fleet

#### Current Green Fleet (2020 CACC Report + Recent Additions)

- Ethanol (E-85): 2,763 Vehicles, 1,154,061 Gallons Dispensed
- Renewable Natural Gas (RNG): 75 L/M Duty Vehicles, 43,025 **GGE** Dispensed
- Compressed Natural Gas (CNG): 14 Trucks, 4,998 DGE Dispensed
- Hybrid Vehicles: 374 Conventional, 20 Plug-In
- Battery Electric: 6 LD Vehicles, 8 Level II Charging Stations



#### **ELECTRIC VEHICLES**

Convert 25% of Non-Emergency LD Fleet (182 vehicles) to EV by 2023; Install 182 Level 2 Charging Stations & 9 DC Fast Chargers. Issue bids in 2022

\$15.5 million in CMAQ Program

grant funding + Infrastructure Bill

 Explore converting City operations fleet (garbage trucks, street sweepers, snow plows, etc.) to EV.



#### **X** Challenges and Opportunities

#### **Challenges:**

- Cost of vehicles, stations & installation
- Technical assistance to design for current and future needs
- Complexity of municipal fleet and product availability

#### **Opportunities:**

- Existing grants + infrastructure bill
- Internal contracts / joint purchase agreements
- Job order contracts / internal resources
- New vehicles! / outreach / training

Training workforce & drivers



### **Alternative e-Mobility**

#### **Divvy Bike Share**

- Currently 10,000 bikes & 800+ stations
- Hybrid dock & dockless system
- E-Bikes launched August 2020
- Over 5M rides so far 2021

#### Other e-Mobility Programs

Scooter Sharing





### **X** Support for Government Fleet EV Adoption

- What role do the utilities play in lowering costs for public fleets to adopt and operate EVs?
- What can utilities do to facilitate lower purchase price of vehicles and chargers?
- How can the utilities streamline infrastructure implementation?
- Provide resources/funding for technical assistance
- Support for other e-mobility options, not just vehicles
- Periodic progress reports on gov/public fleet projects in Illinois